

CLAIMS

What is claimed is:

1. A bearing assembly, comprising:  
a bearing insert;  
5 a bearing housing adapted to house the bearing insert;  
a cover removably securable to the bearing housing; and  
a rotatable flinger secured to the cover, the rotatable flinger having a first opening  
therethrough, the first opening being adapted to receive the rotatable shaft and to enable the  
rotatable flinger to form a compression seal against the rotatable shaft.

2. The bearing assembly as recited in claim 1, wherein the rotatable flinger has  
an inner flange and an outer flange, the inner and outer flanges having a greater diameter  
than a second opening through the cover, the inner and outer flanges cooperating with a  
portion of the cover surrounding the second opening to secure the rotatable flinger to the  
cover.

3. The bearing assembly as recited in claim 2, wherein the inner flange is  
smaller in diameter than the outer flange.

4. The bearing assembly as recited in claim 2, further comprising a grease  
relief to enable grease within the bearing assembly to pass to a location exterior of the  
bearing assembly.

5. The bearing assembly as recited in claim 4, wherein the grease relief  
comprises a notch in the inner flange.

6. The bearing assembly as recited in claim 1, wherein the bearing insert  
comprises a plurality of ball bearings.

7. The bearing assembly as recited in claim 6, wherein the bearing insert comprises a plurality of roller bearings.

5 8. The bearing assembly as recited in claim 1, wherein the cover comprises a peripheral flange and the bearing housing comprises an annular groove, wherein the cover is secured to the bearing housing by elastically deforming the cover to position the peripheral flange within the annular groove.

10 9. The bearing assembly as recited in claim 8, further comprising an external sealing member positionable adjacent the bearing housing and the cover to form a seal between the bearing housing and the cover.

15 10. The bearing assembly as recited in claim 1, wherein the shaft extends through the bearing assembly, the bearing assembly further comprising a second cover and a second rotatable flinger secured to the second cover to form a seal between the bearing assembly and the shaft, the second cover and second rotatable flinger being disposed opposite the first cover and the first rotatable flinger on the bearing housing.

20 11. The bearing assembly as recited in claim 1, wherein the rotatable flinger comprises an outer flanged portion, wherein the outer flanged portion is configured to fling fluid contacting the outer flanged portion away from the rotatable flinger.

25 12. The bearing assembly as recited in claim 1, wherein the cover is adapted to form an interior volume when secured to the bearing housing.

13. A sealing assembly for forming a seal between a bearing assembly and a rotatable shaft, comprising:  
a cover removably securable to a bearing housing; and

a rotatable member securable to the cover and adapted to receive the rotatable shaft therethrough, the rotatable member being configured to form a seal against the rotatable shaft and to rotate therewith to fling liquids or solids that come into contact with the rotatable member away from the bearing assembly.

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14. The sealing assembly as recited in claim 13, wherein the sealing assembly is adapted to form a rotating seal between the rotatable member and the cover.

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15. The sealing assembly as recited in claim 14, wherein the rotatable member comprises an inner flange and an outer flange, the inner and outer flanges being disposed on opposite sides of the cover to secure the rotatable member to the cover.

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16. The sealing assembly as recited in claim 15, wherein the inner and outer flanges are circular, the outer flange being larger in diameter than the inner flange.

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17. The sealing assembly as recited in claim 15, further comprising grease, wherein the grease forms a seal between the rotatable member and the cover.

18. The sealing assembly as recited in claim 17, further comprising a grease relief in the inner flange.

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19. The sealing assembly as recited in claim 13, wherein the cover comprises a peripheral flange configured for insertion within an annular groove of a bearing housing to secure the cover to the bearing housing.

20. The sealing assembly as recited in claim 19, wherein the cover comprises an elastically deformable material.

21. The sealing assembly as recited in claim 13, wherein the cover comprises a rigid plate.

22. A method of assembling a bearing assembly for supporting a rotatable shaft,  
5 comprising the acts of:

engaging a rotatable shaft with a flinger operable to rotate with the rotatable shaft  
and form a compression seal therewith;

positioning the rotatable shaft through a portion of a bearing insert;

rotatably securing the flinger to a removable cover; and

10 securing the cover to a bearing housing.

23. The method as recited in claim 22, wherein rotatably securing the sealing  
member to the removable cover is performed prior to engaging the rotatable shaft with the  
flinger.  
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24. The method as recited in claim 22, wherein engaging comprises sliding the  
flinger over the rotatable shaft.

25. The method as recited in claim 22, wherein the securing the removable  
cover to a bearing housing is performed by snapping the removable cover onto the bearing  
housing.  
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26. The method as recited in claim 22, further comprising the act of securing the  
bearing insert to the bearing housing.  
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